(FILE 'HOME' ENTERED AT 17:33:01 ON 16 SEP 2005)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 17:33:23 ON 16 SEP 2005

L1	15990	S (DISPERSED PHASE) OR (ONE PHASE)
L2	19	S L1 (S) MICROPARTICLE?
L3	0	S L2 (P) (PEG OR (POLYETHYLENE GLYCOL))
L4	0	S (DEXTRAN? (S) POLMER) (S) POLYALIPHATIC
L5	1	S DEXTRAN? (S) POLYALIPHATIC
L6	0	S MICROPARTICLE? (S) POLYMER (S) POLYALIPHATIC
L7	3522	S MICROPARTICLE? (S) POLYMER
L8	0	S L7 (P) POLYALIPHATIC
L9	680	S MICROPARTICLE? (S) EVAPORAT?
L10	4	S L9 (S) DEXTRAN?
L11	992	S MICROPARTICLE? (P) EVAPORAT?
L12	11	S L11 (P) DEXTRAN?
L13	0	S L11 (P) POLYALIPHATIC
L14	11	DUP REM L2 (8 DUPLICATES REMOVED)
L15	1	DUP REM L10 (3 DUPLICATES REMOVED)
L16	5	DUP REM L12 (6 DUPLICATES REMOVED)

IN Orly, Isabelle; Levy, Marie Christine; Perrier, Eric
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
TI Fabrication of microparticles in emulsion by chemical modification of the dispersed phase after emulsification
AB The microparticles, esp. microcapsules, are produced by prepn. of an emulsion of a soln. or mixt. in a dispersing liq. in which the substance or mixt. is substantially insol., and adding to the dispersed phase a chem. agent substantially insol. in the dispersing liq. to cause a chem. or physicochem. reaction in the dispersed phase responsible for formation of microparticles which are then isolated.

AU Berdonosov, S. S.; Baronov, S. B.; Kuz'micheva, Yu. V.; Berdonosova, D. G.; Melikhov, I. V.
SO Rossiiskii Khimicheskii Zhurnal (2001), 45(1), 35-42
CODEN: RKZHEZ; ISSN: 1024-6215
TI Dispersed solid phases from hollow spherical and tubular inorganic microparticles
AB The models for formation of solid dispersions from supersatd. liq. or vapor media with an assumption that the formed polydispersed solids consist of discrete microparticles and the exptl. data from the last 10-15 yr that show the formation of hollow particles and complex texturing of the dispersed phase are discussed. The size of the hollow particles is 5-10 .mu.. The spontaneous formation of the complex textured hollow, tubular, few cm long particles is shown.

AU Choi, Hyoung J.; Cho, Yun H.; Cho, Min S.; Jhon, Myung S.
SO Polymeric Materials Science and Engineering (2001), 84, 505-506
CODEN: PMSEDG; ISSN: 0743-0515
TI Electrorheology of polyaniline-coated poly(methyl methacrylate) microsphere suspensions in silicone oil
AB Monodisperse, spherical microparticles of polyaniline (PA)-coated poly(Me methacrylate) having core-shell structure were prepd. for use as the dispersed phase of ER [electrorheol.] fluid systems in silicone oil. Three different thicknesses of semiconductive PA shell were used. The elec. polarization of ER fluids is the main cause of electrostatic interactions between particles. The particles provide excellent ER effect, although only a small amt. of PA coating is used on the insulating PMMA core.

AU Coombes A G; Tasker S; Lindblad M; Holmgren J; Hoste K; Toncheva V; Schacht E; Davies M C; Illum L; Davis S S

SO Biomaterials, (1997 Sep) 18 (17) 1153-61. Journal code: 8100316. ISSN: 0142-9612.

TI Biodegradable polymeric microparticles for drug delivery and vaccine formulation: the surface attachment of hydrophilic species using the concept of poly(ethylene glycol) anchoring segments.

AB Poly(ethylene glycol)-dextran (PEG-DEX) conjugates have been used as a combined stabilizer and surface modifier to produce resorbable poly(DL-lactide-co-glycolide) (PLG) microparticles by an emulsification/solvent evaporation technique. The use of PEG or dextran polymers alone was incapable of producing microparticles. Particle size measurements revealed smaller mean particle sizes (480 nm) and improved polydispersity when using a 1.2% PEG substituted conjugate relative to a 9% substituted material (680 nm). PLG microparticles modified by post-adsorbed PEG-DEX conjugates flocculated in 0.01 M salt solutions, whereas PLG microparticles prepared using PEG-DEX as a surfactant were stable in at least 0.5 M NaCl solutions. Surface modification of PLG microparticles was confirmed by zeta potential measurements and surface analysis using X-ray photoelectron spectroscopy. The presence of surface exposed dextran was confirmed by an immunological detection method using a dextran-specific antiserum in an enzyme-linked immunosorbent assay. The findings support a model in which the PEG component of the PEG-DEX conjugate provides an anchor to the microparticle surface while the dextran component extends from the particle surface to contribute a steric stabilization function. This approach offers opportunities for attaching hydrophilic species such as targeting moieties to biodegradable microparticles to improve the interaction of drug carriers and vaccines with specific tissue sites.

AU Engelmann, G.; Jobmann, M.; Rafler, G.

SO Industrial Crops and Products (2004), 20(1), 37-48 CODEN: ICRDEW; ISSN: 0926-6690

TI Dextran carbamates-materials for microencapsulation

AB Hydrophobic dextran-N-alkyl carbamates were synthesized as wall materials for microparticles with core/shell structure, using the hydrophilic indicator phenolphthalein as core material. The performance of the carbamates was possible by adding alkylisocyanates to the hydroxy-groups of the dextrans. The synthesizes were carried out by using homogeneous reaction conditions with DMSO as solvent. Two different av. mol. wts. of the dextrans (9900 and 505,000 g/mol), a theor. degree of substitution (DS) of the carbamates, DS=2 and different alkyl chains with 7, 11 and 18 carbon atoms were chosen as structural features of the dextran carbamates. Both intrinsic viscosities and the soly. of the dextran derivs. in selected org. solvents were investigated. Addnl., the av. mol. wts. were analyzed by gel permeation chromatog. The prepn. of microparticles with core/shell structures was performed by a solvent evapn. technique. The release of phenolphthalein was analyzed by suspending the particles in alk. soln. The dependence of the described structural features on the releasing properties of the manufd. microparticles was discussed.